Work Order ID 61820

Page 1

Tuesday, September 07, 2010 12:46:17 PM

Item ID:

D4101-3

Accept

Setup Start

Stop



Revision ID:

Start Date:

Item Name:

Step

Required Date: 10/13/2010

9/7/2010

Start Qty: 20.00 Req'd Qty: 20.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date: 10-2-07 Tooling:

Date:

Date:

Run

Start

Stop



QC:

Date:

SPC (Y/N):

Tool # Plan

Reject

Reject Insp. Stamp

Work Center ID **Draw Nbr**

Sequence ID/

Revision Nbr

Description

Operation

Set Up/ **Run Hours**

Tool ID

Code

Accept Qty

Qty

Number

D4101

В

100

Cut blanks as per folio

0.00



Bandsaw

Jeaspa Bandsaw

Memo

3.85" LONG

SL 10/11/10





110

HAAS 1

HAAS CNC vertical machine #1

Memo

DEBURR

QC2- Inspect parts off machine FAI/FAIB

Mill as per dwg and Folio FA946

0.00

120

Memo

0.00

Quality Control

Dart Aer	ospace	Ltd
----------	--------	-----

W/O:			V	VORK ORDER CHANGI	ES				- +
DATE	STEP	PROCI	EDURE CH	HANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
	<u> </u>								
Part No	: D,	-1101-3 PAR #:	Fault Ca	itegory: Linkschining	NCR: Ye	s) No DO	A:	Date: <u>/</u>	012-02
	R	lesolution: Scrip	Disposit	tion: <u>scup</u>	QA: N/C	Closed:	%	Date: <u>/</u>	0/12/08
NCR: 61	B 20	WC	ORK OR	DER NON-CONFORMA	NCE (NC	R)			
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section Action Description Chief Eng	on B Sigr Da	ı& ∣ _{Sec}	ication tion C	Approval Chief Eng	Approval QC Inspector
10/11/10	110	5 parts screp. the .6/0 mesure are too long .680" R.C. propon error .54:11 @ Rw. A		scrap and destroy no replace. upant a Folio FAS46 to Re			,6	1	
· · · · · · · · · · · · · · · · · · ·		R.C. propon error -still @ Rw.A	Nosiun	upante Folio FAS46 to Re	w. B. Jw	90.	ι ^γ	posiur	10.12-02
				•					
		,				je i			
							-		
							*		

Work Order ID 61820

Page 2

Tuesday, September 07, 2010 12:46:17 PM

Item ID:

D4101-3

Accept

Setup Start

Stop



Revision ID:

Item Name: **Start Date:**

Step

Required Date: 10/13/2010

9/7/2010

Start Oty: 20.00

Rea'd Otv: 20.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Date:

Tooling:

Date: Date:

Start



SPC (Y/N):

Stop

Run

Sequence ID/ Work Center ID

130

Quality Control

Operation **Description**

QC8- Inspect parts - second check

Set Up/ **Run Hours**

0.00 0.00 Tool ID

Tool # Plan Code

Accept Qty

Reject Qty

Reject Insp. Stamp Number

140

HandFinish

Hand Finishing

Memo

Memo

Chemical Conversion Coat per QSI005 4.1

0.00

=) M 10/12/06

150

Quality Control

QC3- Inspect Part Finish

Memo

0.00

0.00

15 Bf 10-12-6.

Dart AE	ospace	Elu							•
W/O:			WO	RK ORDER CHANGES	3				· · · · · · · · · · · · · · · · · · ·
DATE	STEP	PRO	OCEDURE CHAN	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No):	PAR #:	Fault Cate	Jory:	NCR: Yes	No DQ	A:	Date: _	
	R	esolution:	Disposition):	QA: N/C CI	osed:		Date: _	
NCR:			WORK ORDE	ER NON-CONFORMAN	CE (NCF	l)			
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section Action Description Chief Eng		Sign & Verificat		Approval Chief Eng	Approval QC Inspector
				<u> </u>					

Work Order ID 61820

Page 3

Tuesday, September 07, 2010 12:46:17 PM

Item ID:

D4101-3

Accept

Setup Start

Stop



Revision ID:

Item Name: **Start Date:**

Step

Required Date: 10/13/2010

9/7/2010

Start Qty: 20.00

Req'd Qty: 20.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: _____

Date: Tooling:

Set Up/

Run Hours

Date:

Start Run



Date:_____

SPC (Y/N):

Date:

Stop



Sequence ID/ **Work Center ID**

160

Packaging

Operation Description

Identify as per dwg & Stock Location:

Memo

0.00

0.00

Tool ID

Tool # Plan Code

Accept Qty

Reject Qty

Reject Insp. Number

Stamp

Packaging

170

OC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/12/08 H

	par								
W/O:			WO	RK ORDER CHANG	ES				,
DATE	STEP	PRO	OCEDURE CHAI	IGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						15 X T T T T T T T T T T T T T T T T T T		· · · · · · · · · · · · · · · · · · ·	
Part No		PAR #:	Fault Categ	jory:	NCR: Yes	No DQ	 A:	Date: _	
			Disposition: Q/						
NCR:		,	WORK ORDE	R NON-CONFORM	ANCE (NCR)			
DATE	STEP	Description of NC Section A	Initial	Corrective Action Sect Action Description	ion B Sign &		cation on C	Approval Chief Eng	Approval QC Inspector
			Chief Eng	Chief Eng	Date	-		Onioi Eng	QO MOPOSTO

Picklist Print

Tuesday, September 07, 2010 12:46:21 PM

Work Order ID: 61820

Parent Item: D4101-3

Step Parent Item Name:



Location

MAT10

Start Date: 9/7/2010

Required Date: 10/13/2010

Page 1

Start Qty: 20.00

Required Qty: 20.00

Comments:

EST REV:A NEW ISSUE

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	_	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.250X04.50		Purchased	No			100	f	24.7785	0.33	6.947368		-	
U - 1 10 11 ESI DE BING BENE BRIEF MENER DE				5 1					1188111881				

6061-T6 Bar 1.25 X 4.50

Loc Qty

Loc Code

24.77849

112628 24.77849

Dail Ac	ospace	Ltd							
W/O:			WO	RK ORDER CHANG	ES		•••		
DATE	STEP	PRO	OCEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No: PAR #:			Fault Cate	jory:	NCR: Yes No DQA: Date				
	Re	solution:	Disposition):	_ QA: N/C CI	osed:		Date: _	
NCR:		,	WORK ORDE	R NON-CONFORMA	ANCE (NCF	R)			
DATE		Description of NC			ion B	Verific	cation Approval	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section		Chief Eng	QC Inspector
	Į l		1 1			1			

DART AEROSPACE LTD	Work Order:	61820
Description: STEP	Part Number:	D4101-3
Inspection Dwg: D4(0) Rev: B		Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

Tolerance	Actual	Accept	Reject	Method of	Comments
	Dimension			inspection	
+/030	RO.250	✓		R-6	(ef.
+/030	2.349	<u> </u>		Vein	6A-01
+/030	RO.250	~		R-6	ref.
+/030	0.131	J		Vein	60-01
+/030	RO.250	~		R-6	(ef
+/030	R 0.250	~		5 1	11
+/030	0.860	√		Vern	6A-01
-		•			
ay ngapangganggang dan mangangga maming pangganggangga ti timo manggang ang ana panggangan mangan					
				engalan ang manamananan ang ang ang ang ang ang ang ang a	
The second secon					
	+/- · 030 +/- · 030 +/- · 030 +/- · 030 +/ 030	Tolerance Dimension +/030	Tolerance Dimension Accept +/030	Tolerance Dimension Accept Reject +/030	Tolerance Dimension Accept Reject Inspection $+/030$ Ro.250 \checkmark R-6 $+/030$ Ro.250 \checkmark III

Measured by:	B.A	Audited by:		Preliminary Approval:	
Date:	10/11/29	Date: 10	-12-6	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

\$ 10.04.15

DART AEROSPACE LTD	Work Order:	61820
Description: STEP	Part Number:	D4101-3
Inspection Dwg: D4(0) Rev: B		Page 2 of 2

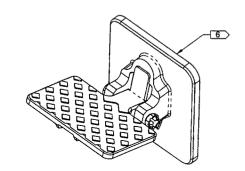
FIRST ARTICLE INSPECTION CHECKLIST

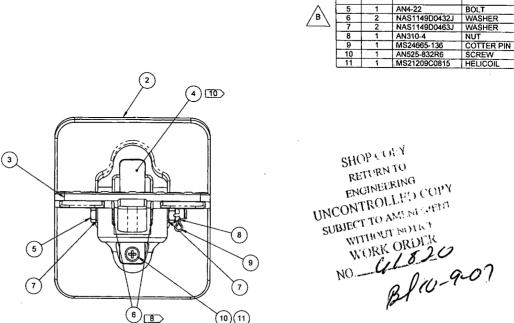
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.030	+/010	0,030	~		Vein	6A-01
RO.06	+/030	RO.063	~		R-6	۲۷۶،
G. 25	+/030	0.249	~		Vern	6A-01
4.00	+/030	4.000	~		۱۱ ,	()
2.60	+/030	2.600.	~		"(11
1.05	+/030	1.051	~		1 ((1
1.53	+/030	1.521	~		ti, ,	1(
0.950	+.015/-:000	0.958	~		١,	11
0.25	+/030	0.252	~		11	((
90	+/- 1/2 0	90	<u> </u>		CNC-03	A-M
0.07	+/030	0.070	~		vern	6A-01
O. 25	+/030	0.245	-		١,	()
00.257	+.005/001	Ø 0,262	~		11	, ,
0,300	+0.000/-0.015	0,296	~		(1	(1
RO.06	+/030	RO-063	-		R-6	ref.
0.600	+1010	0.597			Vern	6A-01
0.270	+0.000/-0.015	0.261	~		11	(1
0.610	+/010	0.610	. 🗸		H-6	31006
0,65	+/030	0.650	J		H-6	31006
0.17	+/030	0.170	~		Vern	GA-01
0.10	+/030	0.105	~		11	"
0.75	+/030	0,748	✓		f i	(1
1.15	+/030	1.148	×		13	11

Measured by: B.A.	Audited by:	Preliminary Approval:	
Date: 10 / 11 / 29	Date: 12.6	Date:	

Rev	Date	Change	Revis	sed by	Approved
E	10.04.14	Added preliminary approval	KJ	\	

\$ 10.06.15





10 (1)

D4101-041 PRE-FLIGHT STEP ASSEMBLY

(6)₍₈₎

RELEASET 2010 -08- 2,3

NOTES:
1) MATERIAL: N/A
2) FINISH: NOINE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: NONE
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4101-041" USING FINE POINT PERMANENT INK MARKER BACK SURFACE 6) IDENTIFICATION. IDENTIFY WITH DART P/N*D4101-041** USING FINE POINT PERMANEL 7) WEIGHT: 1.18 lbs 8) INSTALL NAS1149D0432J WASHER IN BETWEEN STEP AND BRACKET MATING FACES 9) TORQUE AN525832R SCREW TO 15-25 in-lb 10) TEXTURED SIDE TO BOTTOM

В	NAS114 SCREW D4101-5	9D0432J WAS AND HELICO (ZN B4-5)	RF	10.08.05	
Α	NEWISS			RF	10.07.12
REV.	1		DESCRIPTION	BY	DATE
DESIGN RF DRAWN RF			DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECK MFG. A		- #J	DRAWING NO. D4101		REV. B
APPRO DE AP		#	PRE-FLIGHT STEP	ASSEN	SCALE
DATE	10.0	8.05	COPYRIGHT © 2010 BY DAR THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS BUFF MOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMENT WORTHIN PERMISSION FROM DAR!	LIED ON THE EXPRES	SE CONDITION THAT IT IS

QTY ITEM

3

PART NUMBER

D4101-041

D4101-1

D4101-3

D4101-5

DESCRIPTION

PRE-FLIGHT STEP ASSEMBLY

BRACKET

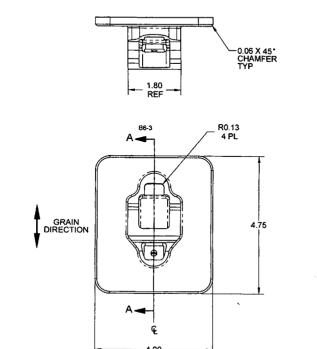
SPRING

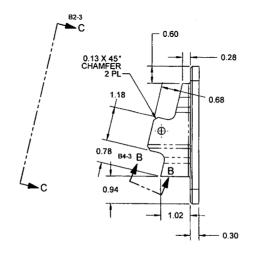
STEP

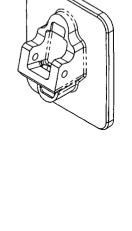
8

(7

	Ospace								,
W/O:			WO	RK ORDER CHANGI	ES				۰
DATE	STEP	PRO	OCEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes	No DQA	\:	_ Date: _	
	Re	esolution:	Disposition	1:	_ QA: N/C CI	osed:		Date: _	
NCR:		V	WORK ORDE	ER NON-CONFORMA	NCE (NCF	R)			
DATE	STEP	Description of NC		Corrective Action Section		Verific	ation	Approval	Approval
DAIL	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section		Chief Eng	QC Inspector
l						į			
					•		1		
					Î				
	•								







RELEASED 2010 -08- 23

D4101-1 BRACKET

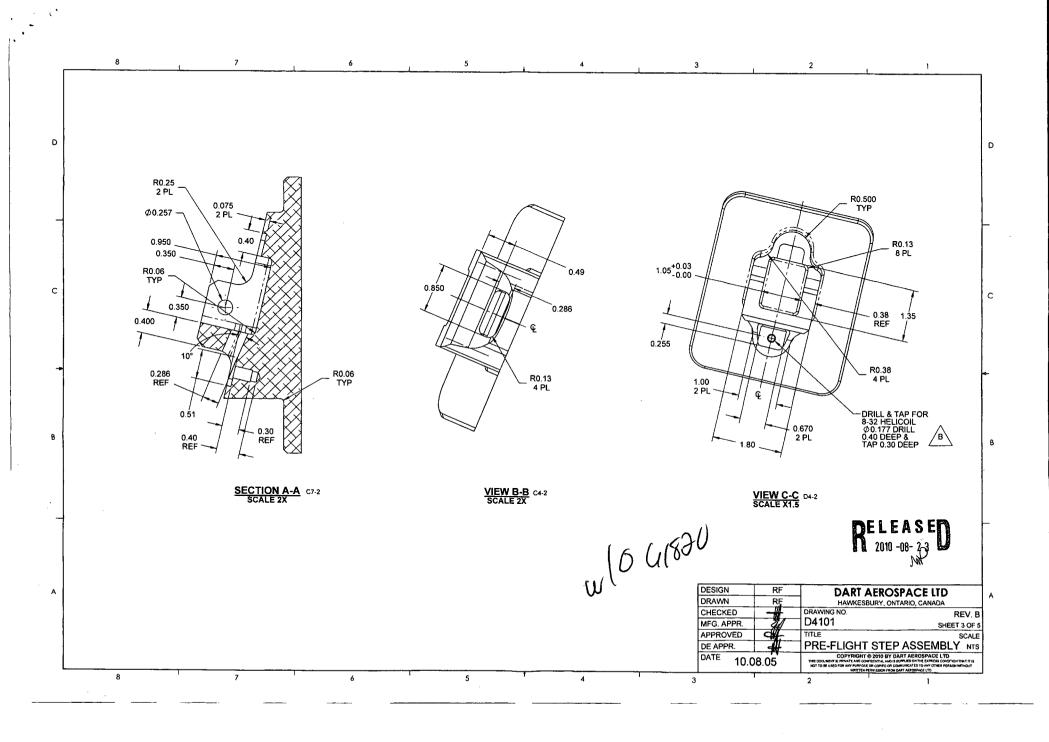
NOTES:
1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 QR AMS-QQ-A-225/8 (QR AMS 4117/4128/4115/4116) QR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160) QR ASTM B211 QR ASTM B221
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED 4) UNITS: INCHES UNLESS OTHERWISE NOTED 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX 6) IDENTIFICATION: N/A 7) WEIGHT: 0.85 lbs

D

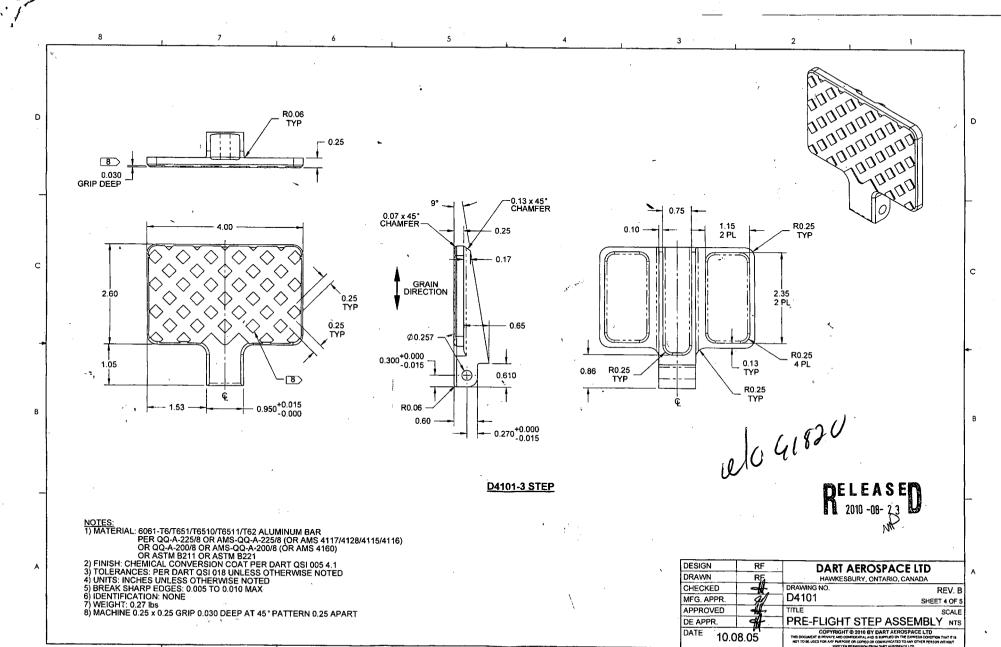
DESIGN	RF	DART AEROSPACE LTD
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	-#	DRAWING NO. REV. B
MFG. APPR.	Ø/	D4101 SHEET 2 OF 5
APPROVED	- 111	TITLE SCALE
DE APPR.	-	PRE-FLIGHT STEP ASSEMBLY NTS
DATE 10.0	8.05	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PROVITE AND CONFIDENTIAL AND IS SUPPLIED ON THE COPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMPLIANCATED TO ANY OTHER PERSON WITHOUT MAINTENANCE PRESSOR OF COMPLIANCATE TO MAINTENANCE PRESSOR OF COMPLIANCATE TO

D

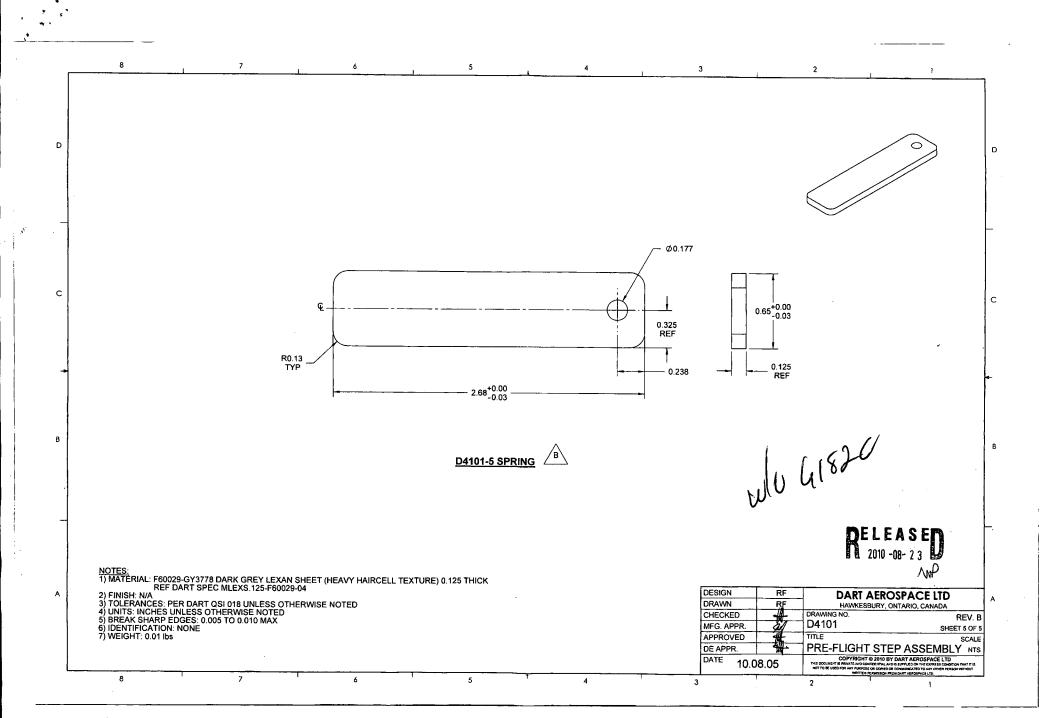
W/O:			WO	RK ORDER CHANG	ES			<u> </u>
DATE	STEP	PRO	OCEDURE CHAI	IGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
							1 Tod Mgi	
Part No		PAR #:	Fault Cate	jory:	_ NCR: Yes	No DQA :	Date: _	
	Re	esolution:	Disposition	1:	_ QA: N/C Cl	osed:	Date: _	
NCR:		,	WORK ORDE	R NON-CONFORM	ANCE (NCR)		
DATE	OTED	Description of NC			ion B	Verification	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
"" 11 								
	1		1		1			



W/O:			W	ORK ORDER CHANGE	ES				, , , , , , , , , , , , , , , , , , ,		
DATE	STEP	PRO	CEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
		·						•			
-							,				
Part No	:	PAR #:	Fault Cat	degory:	NCR: Yes	No DQ	\:	Date:			
	R	esolution:	Dispositi	on:	QA: N/C	Closed:		Date: _			
NCR:		\	WORK OR	DER NON-CONFORMA	NCE (NC	R)					
DATE	STEP	Description of NC		Corrective Action Section		Verific	ation	Approval	Approval		
DAIL	JILI	Section A	Initial Chief Eng	Action Description Chief Eng	NCR: Yes No DQA: QA: N/C Closed: NCE (NCR)	ign & Section C				Chief Eng	QC Inspector
					.			·			
					•						
					-						
							•				
							•				
							4	ĵ.			
	•										



Dart Ae	rospace	e Ltd							
W/O:			V	ORK ORDER CHANGE	S				, ,
DATE	STEP	PRO	CEDURE CH	IANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Ca	tegory:	NCR: Yes	No DQ	A :	_ Date: _	
	R	esolution:	Disposit	ion:	QA: N/C CI	osed:		Date: _	
NCR:		W	ORK OR	DER NON-CONFORMAI	NCE (NCF	R)			
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section Action Description Chief Eng	Sign &	. i	cation ion C	Approval Chief Eng	Approval QC Inspector
			Office Ling	One Lng	Date			7	



W/O:		WORK ORDER CHANGES			······			***
DATE	STEP	PROCEDURE CHANGE	Ву	Da	te	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
							**	
				4				
					į.			
					•	٠		
					:			
Part No	:	PAR #: Fault Category: NO	CR: Ye	s No	DQA:		Date:	

Resolution: _____ Disposition: _____ QA: N/C Closed: ____ Date: ____

NCR:			ORK OR	DER NON-CONFORMANC	E (NCR)			,
	Description of NC	Corrective Action Section B			Verification	Approval	Approval	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspector
								-
		Free &		,				٠.
· •	,	·						
						٠.		
						,		
		,						